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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,889

11/18/2005

Mark Wells

39498

8390

39313

7590

12/26/2006

CARL M. NAPOLITANO, PH.D.

ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST, P.A.

255 SOUTH ORANGE AVE., SUITE 1401

P.O. BOX 3791

ORLANDO, FL 32802-3791

EXAMINER

DINH, PHUONG K

ART UNIT

PAPER NUMBER

2839

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/542,889	Applicant(s) WELLS, MARK	
	Examiner Phuong KT Dinh	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/06</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, pin with tapered region of the claims 26-29 and 32 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 32 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4. Claim 32 is unclear and how it made.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 19, "the pin is secured in the sleeve" is unclear.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2839

9. Claims 1, 4-6, 8-11, 16-19, 20,25, 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Stinsky (U. S. Patent 5,601,443).

10. Regarding claims 1, 19, 33, 34, Stinsky, see 3-4, discloses an electrical connection device arranged for connection to a machine cable, the device comprising: a pin 34 and a socket 26, each having engagement surfaces and one of the pin 34 and the socket having a further surface that forms a wedging surface 22 for the device, the pin 34 and the socket 26 being moveable relative to each other from a released position 50 to an engaged position in which the engagement surfaces are engaged to form an electrical contact and a wedge portion 22 arranged to impart a force on the wedging surface 22 on movement to the engaged position, wherein the pin 34 and the socket 26 are arranged so that the engagement surfaces move into opposing relationship on movement to the engaged position and the force imparted on the wedging surface 22 biases one of the opposing engagement surfaces against the other engagement surface.

Regarding claim 4, Stinsky discloses the wedge portion 22 is not integrally formed with the pin 34 or the socket 26..

Regarding claim 5, Stinsky discloses the wedge portion 22 comprises a material other than that of the pin or the socket.

Regarding claim 6, Stinsky discloses the wedge portion 22 is a part that is separable from the pin or the socket.

Regarding claim 8, Stinsky discloses at least one of the pin 34 and the socket 20 have a marginal portion that includes the wedging surface and that has at least one gap

Art Unit: 2839

that expands or reduces when the wedge portion 22 imparts a force on the wedging surface so that the outer perimeter of the marginal portion expands or compresses respectively.

Regarding claim 9, Stinsky discloses the socket 20 includes the marginal portion.

Regarding claim 10, Stinsky discloses the wedge portion 22 is arranged such that, when the pin 34 and the socket 20 are moved relative to each other to the engaged position, the wedge portion 22 compresses the marginal portion against the pin whereby the pin and the socket engage to establish the electrical connection.

Regarding claim 11, Stinsky discloses the socket 20 is of a longitudinal shape and the marginal portion is an end-portion.

Regarding claim 16, Stinsky discloses the pin 34 and the socket 20 are of a generally round cross-section.

Regarding claim 17, Stinsky discloses the wedge portion 22 is provided in form of a ring-like portion positioned such that, when the pin 34 and the socket 20 are moved relative to each other towards the engaged position, the wedge portion 22 wedges the end-portion of the socket 20 against the pin 34.

Regarding claim 18, Stinsky discloses the pin 34 and the socket 20, when engaged, are surrounded by a sleeve.

Regarding claim 20, Stinsky discloses the socket 20 has an inner surface that has a substantially uniform internal diametrical dimension.

Regarding claim 25, Stinsky discloses the pin 34 has an outer surface that has a substantially uniform external diametrical dimension.

Art Unit: 2839

11. Claims 1, 7, 21-24, 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by MacDONALD'314.

12. Regarding claims 1, 33, 34, MacDONALD'314, discloses an electrical connection device arranged for connection to a machine cable, the device comprising: a pin 10 and a socket 21, each having engagement surfaces and one of the pin 10 and the socket having a further surface that forms a wedging surface for the device, the pin 10 and the socket 21 being moveable relative to each other from a released position to an engaged position in which the engagement surfaces are engaged to form an electrical contact and a wedge portion 30 arranged to impart a force on the wedging surface on movement to the engaged position, wherein the pin 21 and the socket 21 are arranged so that the engagement surfaces move into opposing relationship on movement to the engaged position and the force imparted on the wedging surface biases one of the opposing engagement surfaces against the other engagement surface.

Regarding claim 7, MacDONALD, see figure 4, discloses the wedge portion 29 is adhered to a portion of the pin 10 or the socket 21.

13. Claims 1, 14, 21-24, 26-29, 32, 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by MacDONALD'037.

14. Regarding claims 1, 32- 34, MacDONALD'037, discloses an electrical connection device arranged for connection to a machine cable, the device comprising: a pin 29 and

Art Unit: 2839

a socket 28, each having engagement surfaces and one of the pin 21 and the socket having a further surface that forms a wedging surface 20 for the device, the pin 21 and the socket 28 being moveable relative to each other from a released position to an engaged position in which the engagement surfaces are engaged to form an electrical contact and a wedge portion 20 arranged to impart a force on the wedging surface on movement to the engaged position, wherein the pin 21 and the socket 28 are arranged so that the engagement surfaces move into opposing relationship on movement to the engaged position and the force imparted on the wedging surface 20 biases one of the opposing engagement surfaces against the other engagement surface.

Regarding claim 14, MacDONALD'037 discloses the wedge portion 20 comprises an electrically conductive material.

Regarding claim 21, MacDONALD'037 discloses the socket 28 has an inner surface that has a tapered region 30.

Regarding claim 22, MacDONALD'037 discloses the tapered region 30 separates a region of smaller interior diameter from a region of larger interior diameter.

Regarding claim 23, MacDONALD'037 discloses the region of smaller interior diameter is not positioned at an end of the inner surface.

Regarding claim 24, MacDONALD'037 disclose the region of the smaller interior diameter comprises the engagement surface and is arranged so that, when the wedge portion 20 imparts a force on the wedging surface, the region of smaller interior diameter frictionally engages with the engagement surface of the pin 21.



Art Unit: 2839

Regarding claim 26, MacDONALD'037 discloses the pin 21 has an outer surface that has a tapered region 30.

Regarding claim 27, MacDONALD'037 discloses the tapered region 30 separates a region of smaller exterior diameter from a region of larger exterior diameter.

Regarding claim 28, MacDONALD'037 discloses the region of the larger exterior diameter comprises the engagement surface and is arranged so that, when the wedge portion imparts a force on the wedging surface, the region of larger exterior diameter frictionally engages with the engagement surface of the socket.

Regarding claim 29, MacDONALD'037 discloses the region of larger exterior diameter is not positioned at an end of the outer surface.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2- 3, 12-13,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinsky.

Art Unit: 2839

Regarding claim 2, Stinsky discloses the claimed invention except for being arranged for delivery of a power of a few hundred kilowatts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the power of a few hundred kilowatts so as to provide to operate a device such as a lamp.

Regarding claim 3, Stinsky discloses the claimed invention except for arranged for delivery of power having an associated voltage of one or more kilovolts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use of arranged for delivery of power having an associated voltage of one or more kilovolts so as to provide to operate a device such as a lamp.

Regarding claims 12-13 and 15, Stinsky discloses the claimed invention except for the wedge portion comprises a flexible material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the wedge portion comprises a flexible material so as provide for better gripping.

Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacDONALD'037

Regarding claim 30 and 31, MacDONALD'037 discloses the claimed invention but not clearly shows for the gap is one of a plurality of longitudinal gaps that split the socket into three or more fingers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify MacDONALD to provide the gap is one of a plurality of longitudinal gaps that split the socket into three or more fingers so as to provide for better resilient.

Art Unit: 2839

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong KT Dinh whose telephone number is 571-272-2090. The examiner can normally be reached on 8 -5, 5 days a week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Phuong Dinh\  
November 02, 2006

Phuong KT Dinh  
Primary Examiner  
Art Unit 2839